

Synthesis of the novel β -aminophosphoryl compounds and their acid-base properties and membrane-transport abilities towards carboxylic acids

Cherkasov R., Garifzyanov A., Kurnosova N., Matveeva E., Odinets I.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The highly efficient synthesis of β -aminophosphoryl compounds with one and two ethylphosphoryl groups was performed by the addition of amines to the vinylphosphoryl compounds in water as a solvent. The acid-base properties and membrane-transport abilities of the target compounds towards carboxylic acids were studied. Selectivity towards acetic acid was revealed.
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Keywords

β -aminophosphine oxides, β -aminophosphonates, Acid-base properties, Carboxylic acids, Green chemistry, Membrane-transport properties, Reactions in water